Barracuda Networks Technical Documentation

Barracuda Control Server

Administrator's Guide

Version 3.x

RECLAIM YOUR NETWORK™

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Chapter 1
Getting Started

This chapter provides an overview of the Barracuda Control Server and describes important concepts.

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Overview

The Barracuda Control Server web interface enables administrators to monitor and configure multiple Barracuda Networks products from a single console. Through the web interface, you can check the health of all connected devices, run reports that are generated by gathering data from all the devices, and assign roles with varied permissions to different types of users.

The Barracuda Control Server web interface provides for convenient configuration and management of multiple Barracuda Networks device settings, while providing a view of each device web interface for individual configuration or reporting.

Key statistics can be viewed by device type at a glance on the **CLOUD CONTROL >Status** page of the web interface with the ability to drill down for more detail into the individual web interface for each connected device.

This guide walks you through installation and initial configuration of your Barracuda Control Server, and provides concepts and examples to help you understand how to manage Barracuda Networks products with the Barracuda Control Server web interface according to your organization's deployment needs and security policies.

Concepts

Understanding these concepts enables you to take full advantage of the Barracuda Control Server features for configuring and synchronizing settings on individual or groups of Barracuda Networks products.

Administrator Access

There are *two* different administrator accounts:

- **Barracuda Control Server Administrator Account** – Manage and configure the Barracuda Control Server. To configure and manage the Barracuda Control Server, log into the system using **admin** as your user name and password. Once logged in, you can view and manage the device, update security definitions, manage the displayed image, troubleshoot the device, and view tasks and task errors.
- **Barracuda Control Server Account Admin** – Manage and connect products through the Barracuda Control Server web interface. Create users and assign various permissions to each user for access to the Barracuda Control Server, connect devices, and view device status.

Use the web interface to link your Barracuda Network devices including:

- Barracuda Spam Firewall
- Barracuda Web Filter
- Barracuda Web Application Firewall
- Barracuda Message Archiver
- Barracuda Link Balancer
- Barracuda Load Balancer

When you log in to the Barracuda Control Server as the account admin, the connected devices display in the left pane.

Management Contexts

There are three ‘contexts’ you use to administer the Barracuda Control Server web interface and the connected products. These contexts include:

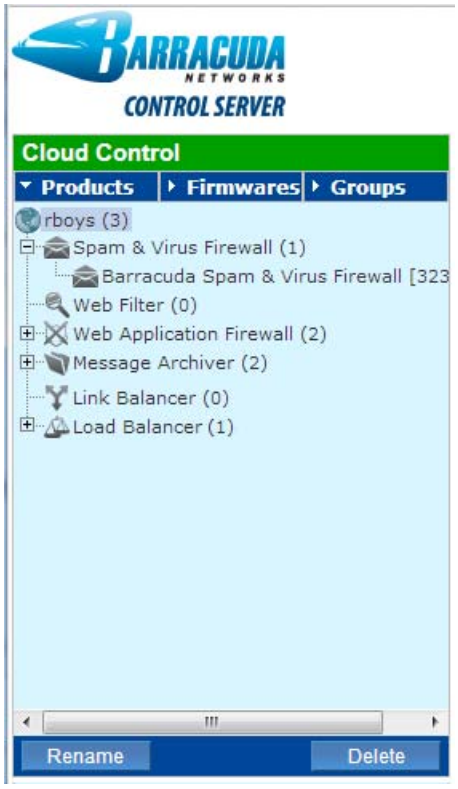
- The *Cloud Control* context; for managing Barracuda Control Server web interface configuration;
- The *Product* context; for managing an individual Barracuda Networks product using the product web interface;
- The *Group* context; for managing a group of the same type of Barracuda Networks products with one web interface, or for grouping products by company, location, or department.

These contexts are described briefly below.

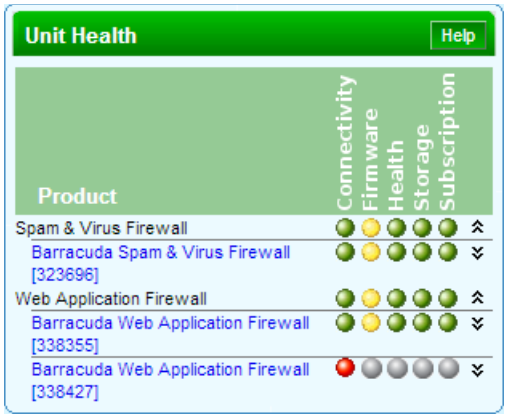
Cloud Control Context

When you log into the Barracuda Control Server web interface, you first see the Cloud Control *context*–on the **CLOUD CONTROL > Status** page–which displays a snapshot of product traffic statistics for the connected Barracuda Networks product(s).

The Cloud Control pane on the left displays either a list of individual products connected to the Barracuda Control Server, or groups of products which you create:



The center pane provides an interface for managing your account and for connecting products, as well as a snapshot of product traffic statistics for all connected products. The Unit Health pane on the right includes a performance overview, connectivity, firmware, storage, and subscription status for each individual product organized by product type:



Once you click on an individual product, either in the Cloud Control pane or in the Unit Health pane, you leave the 'Cloud Control context' and drill-down into the product type web interface. The product web interface displays activity for an individual product if you have only one of that type connected. If you have multiple of one product type connected, the settings and statistics for all products of that type display in one web interface as described below.

Group Context

Grouping Barracuda Networks products enables you to manage settings and apply policies across multiple Barracuda Networks products of the same type from one web interface. You can also use "grouping" to organize your Barracuda Networks products by location, company, department, etc., and you can include products of different types. Grouping happens in one of two ways:

1. **By default, the Barracuda Control Server groups Barracuda Networks products by product type.** For example, if you have two or more Barracuda Web Application Firewalls connected to a Barracuda Control Server, they are automatically grouped as such. You can then click on that product type in the Cloud Control pane and see one web interface with aggregated statistics and settings for all of the devices within that group. From the web interface, you can set policies for all of the products in the group at the same time since they are the same product type. This group context also enables reporting on aggregated statistics across a group.
2. You can *create* a grouping of two or more products. When you click on that group in the Cloud Control pane, aggregated statistics display on the **Status** page for each product type in the group.

Additional reasons to manage products in the group context include:

- If you have many devices in one or more locations, managing them with a central console enables you to easily track firmware versions across products and keep them up-to-date.
- Grouping devices by location helps you keep track of where each device is physically located in case it needs service. As long as the unit is joined to the Barracuda Control Server, you do not need to look up the admin password to configure or update the product.
- Grouping devices of the *same* type enables viewing 'exceptions' in which values for the same setting differ across the devices.
- Grouping either devices of the *same* type or of *different* types provides a performance and traffic statistic snapshot on the **CLOUD CONTROL > Status** page for each device in the group. Statistics are aggregated for devices of the same type.

Product Context

If you have only one of any Barracuda Networks product type connected to the Barracuda Control Server, when you click on that product link in the Cloud Control pane or in the Unit Health pane, the web interface for that individual device displays. From the product web interface, you manage the individual settings just as you would if you logged into the device directly.

Exceptions

When you have more than one of a Barracuda Networks product type connected to the Barracuda Control Server, and you view the settings of all of them as a group (with one web interface as described above), a yellow **Exception** ( ) icon displays if the value of the setting is not the same on all devices in the group. When you hover the mouse over the icon, the Barracuda Control Server clearly indicates what the values for that setting are on each device, so that you can change the settings if desired. See *Dealing With Exceptions* for more information and examples.

Chapter 2
Using the Barracuda Control Server

This chapter covers features of the Barracuda Control Server appliance.

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Initial Setup

These are the steps to set up your Barracuda Control Server.

Prepare for Installation

Before installing your Barracuda Control Server, verify you have the necessary equipment; if any item is missing or damaged, please contact your Barracuda Networks Sales representative:

- Barracuda Control Server
- AC power cord
- Mounting rails

Also required for installation:

- Ethernet cables
- VGA monitor (recommended)
- PS2 keyboard (recommended)

Connect Barracuda Control Server to Network

To physically install the Barracuda Control Server:

1. Fasten the Barracuda Control Server to a standard 19-inch rack or other stable location.

Caution

Do not block the cooling vents located on the front and rear of the unit.

2. Connect a CAT5 or CAT6 Ethernet cable from your network switch to the Ethernet port on the **back** of your Barracuda Control Server.

   The Barracuda Control Server supports both 10BaseT and 100BaseT Ethernet. Barracuda Networks recommends using a 100BaseT connection for best performance.

   Do not connect any other cables to the other connectors on the unit. These connectors are for diagnostic purposes.
3. Connect a standard VGA monitor, PS2 keyboard, and the AC Power Cord to the appliance. AC input voltage range is 100-240 volts at 50/60 Hz.

   After you connect the AC power cord the Barracuda Control Server may power on for a few seconds and then power off. This is standard behavior.
4. Press the **Power** button located on the front of the unit.

   The login prompt for the administrative console displays on the monitor, and the light on the front of the system turns on. For a description of each indicator light, refer to *Front Panel Indicator Lights*.

Configure IP Address and Network Settings

To set an IP address from the administrative console:

1. Connect your keyboard and monitor directly to the Barracuda Control Server.
2. At the `barracuda login` prompt, enter **admin** for the login and **admin** for the password.

   The User Confirmation Requested window displays the current IP configuration of the Barracuda Control Server.
3. Using your Tab key, select **Change** and press **Enter** to change the IP configuration.
4. Enter the new IP address, netmask, and default gateway for your Barracuda Control Server. Select **Save** to enter your changes. Select **Exit**.

   The new IP address and network settings are applied to your Barracuda Control Server.

Network Path

Barracuda devices you wish to manage through the Barracuda Control Server must have a network path between the two devices and at least one of the following ports available to communicate between the devices: port 80, 8000, 23557, or 48320.

Configure Your Corporate Firewall

If your Barracuda Control Server is located behind a corporate firewall, you may need to open ports 1194 and ports 5120-5129 outbound for both TCP and UDP to allow communication between the Barracuda Control Server and the Internet.

These ports are used to transfer data either to the Barracuda Control Server, or to another Barracuda Networks appliance over the Internet. To restrict outbound network traffic on these ports, contact Barracuda Networks Technical Support for a list of the IP addresses to allow.

Configure the Barracuda Control Server Administrative Settings

After specifying the IP address of the Barracuda Control Server, configure the Barracuda Control Server from the administration interface.

To configure administrative settings on the Barracuda Control Server:

1. From a web browser, enter http:// followed by the IP address of the Barracuda Control Server, followed by the default web interface HTTP Port (:8000).
   For example: `http://192.168.200.200:8000`
2. Log into the administration interface using **admin** for both the username and password.
3. Go to **CLOUD CONTROL > IP Configuration**, and perform the following steps:
   - 3a. In the **TCP/IP Configuration** section, verify the IP address, netmask, and default gateway for your Barracuda Control Server (entered in step 4. above in the *Configure IP Address and Network Settings* section).
   - 3b. In the **DNS Configuration** section, enter the IP address of your primary and secondary DNS servers (if these have not yet been set up).

3c. If the Barracuda Control Server is behind a proxy server, enter the proxy server IP address and port number, and if required, enter the proxy server username and password in the **Proxy Server Configuration** section.

3d. Enter the default domain name of the Barracuda Control Server in the **Domain Configuration** section.

Click **Save Changes**.

Note

Whenever your Barracuda Control Server IP address is changed on the **IP Configuration** page, you are disconnected from the administration interface. You must log in again using the new IP address.

Configure SNMP Access

You can configure SNMP access between the Barracuda Control Server and an SNMP monitor or other program used to query for system information on the **CLOUD CONTROL > Administration** page.

Front Panel Indicator Lights

The Barracuda Control Server has five indicator lights on the front panel that blink when the system processes any message. *Figure 2.1* displays the location of each of the lights.

Figure 2.1: Barracuda Control Server front panel indicator lights

Connect to the Barracuda Control Server

You can connect one or more Barracuda Networks products to a Barracuda Control Server by doing the following:

1. Log into the Barracuda Control Server web interface as the *Barracuda Control Server Account Admin*.
2. The **CLOUD CONTROL > Status** page displays, including a message indicating that no products are connected.
3. Go to the **CLOUD > Connect Products** page, and copy the **Validation Token**.
4. In another browser window, log into the product you wish to connect to the Barracuda Control Server as the administrator. From the product **ADVANCED > Firmware Upgrade** page, check to

make sure you have the latest firmware installed on the product. If not, download and install it before proceeding.

5. Enable Expert Mode on the product you wish to connect to by adding the following content to the end of the URL in your browser address bar:
   `&expert=1`
6. From the **ADVANCED > Cloud Control** page on the product, select *Yes* for **Connect to Barracuda Cloud Control**.
7. Enter the username and password of the account admin for your Barracuda Control Server.
8. In the **Barracuda Cloud Control** field, enter the IP address or hostname of the Barracuda Control Server.
9. Paste the Barracuda Control Server validation token you copied in **step 3** into the associated field.
10. Click **Save Changes**. Note that your product can connect with only one Barracuda Control Server at a time.
11. In the Barracuda Control Server web interface, refresh your browser page and you should see, in the Products pane on the left side of the page, a (1) immediately to the right of the newly connected Barracuda Networks product type. By default, statistics are presented for that product. Click on the product link to configure using the web interface for that device.

Using the Task Manager to Monitor System Tasks

The **ADVANCED > Task Manager** page provides a list of tasks that are in the process of being performed, and displays any errors encountered when performing these tasks. Some of the tasks that the Barracuda Control Server tracks include:

- Configuration restoration
- Connections
- Removal of invalid users

If a task takes a long time to complete, you can click the **Cancel** link next to the task name and then run the task at a later time when the system is less busy. The Task Errors section lists an error until you manually remove it from the list; errors are not automatically phased out over time.

Troubleshooting

Testing Network Connectivity

The Barracuda Control Server web interface provides a suite of tools to help diagnose potential network problems, including ping, telnet, dig/NS-lookup, TCP dump, and traceroute. See the online help on the **Network Connectivity Tests** section of the **ADVANCED > Troubleshooting** page for details about using these tools. You must be logged in as the Barracuda Control Server administrator to access the troubleshooting tools.

Connect to Barracuda Support Servers

In the **Support Diagnostics** section of the **ADVANCED > Troubleshooting** page, you can initiate a connection between your Barracuda Control Server and the Barracuda Networks Technical Support Center which allows technical support engineers to troubleshoot any issues you may be experiencing.

Contacting Technical Support

To contact Barracuda Networks Technical Support:

- By phone: call 1-408-342-5400, or if you are in the United States, (888) Anti-Spam, or (888) 268-4772
- By email: use *support@barracuda.com*
- Online: visit *http://www.barracuda.com/support* and click **Support Case Creation**.

There is also a Barracuda Networks Support Forum available where users can post and answer other users' questions. You can log in or create a new Barracuda Networks account by clicking **Sign In** at *https://community.barracudanetworks.com/*.

Chapter 3
Accounts and Roles

Use this chapter to understand managing user accounts and permissions.

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Administrator Access

There are two different administrator accounts, one to manage and configure the Barracuda Control Server including IP configuration and SNMP management, and one to create users and connect and manage products through the Barracuda Control Server web interface.

Barracuda Control Server Administrator Account

To configure and manage the Barracuda Control Server, log into the device using **admin** as both your user name and password. Once logged in, you can view and manage the device, update security definitions, manage the images displayed in the web interface, troubleshoot the device, view tasks and task errors, and create the *Barracuda Control Server Account Admin*. To change your password, log into the web interface, and go to **CLOUD CONTROL > My Account** and change your password.

Barracuda Control Server Account Admin

Through the Barracuda Control Server web interface, you create users and assign various permissions to each user for access to the Barracuda Control Server, connect devices, and view device status.

Use the web interface to link your Barracuda Networks devices, including:

- Barracuda Web Filter
- Barracuda Web Application Firewall
- Barracuda Message Archiver
- Barracuda Link Balancer
- Barracuda Load Balancer

When you log into the Barracuda Control Server as a *Barracuda Control Server Account Admin*, the connected devices display in the left pane.

Creating the Barracuda Control Server Account Admin

To create the *Barracuda Control Server Account Admin*, log into the web interface using the *Barracuda Control Server Administrator Account* (**admin**/**admin**), and complete the following steps:

1. Go to the **CLOUD CONTROL > Account Management** page, and in the **Account Creation** section, enter the account admin name, administrator email address, and select the preferred time zone for the account.
2. Click **Create Account**. The account displays in the **Account View** section.
3. A confirmation email containing the login credentials is sent to the email address entered in step 1 above. Use these credentials to log into the web interface to create users and assign permissions, connect devices, and view device status.

Managing User Accounts

To create a new Barracuda Control Server user, log into the Barracuda Control Server web interface as the *Barracuda Control Server Account Admin*, and then use the following steps:

1. Go to the **CLOUD CONTROL > User Management** page, and in the **Create User** section, enter the user email address, and select the preferred time zone.
2. From the **Role** drop-down menu, select from the following options:
   - **View Status only** - User can view connected device statistics based on **Access** settings on the **CLOUD CONTROL > Status** page.
   - **View Reports, Logs, and Status only** - User can view connected device statistics on the **CLOUD CONTROL > Status** page, and track events such as login, connecting, or disconnecting specific devices by user, account, name, and date/time on the **CLOUD CONTROL > Audit Log** page. You may wish to assign this role to a support person or office manager to provide performance and traffic reports for each product type.
   - **All Actions** - Use this role to create a Barracuda Control Server administrator account; user can create users and assign permissions, connect devices, view device status, and view tasks and task errors based on **Access** settings.
   - **Account Admin** - Use this role to create a *Barracuda Control Server account admin*; user can configure and manage the Barracuda Control Server, update security definitions, and view tasks and task errors.

Note

Once logged into the Barracuda Control Server, users can manage their own account information using the **CLOUD CONTROL > My Account** page.

3. The **Access** list displays all devices currently connected to the Barracuda Control Server by group. Select only those units you wish to make available to the user. Limit which units to which the user has access. When a unit is checked, the user always has access to that unit. When a folder is checked, the user has access to everything under that folder including and Barracuda Networks devices added under the folder in the future. Removing units from the folder in the future removes the user access. Note that the **Account Admin** role always has access to *all* connected devices.
4. Click **Create User** to add the new user. An email is sent to the user's email address with their log in username and password. Once added, the user account displays in the **User View** table.

Administrator Actions

Once you create a user, the user account details display in the **User View** table on the **CLOUD CONTROL > User Management** page. From this table you can take the following actions:

- **Reset Password** – Resets the user's password; a new password is automatically generated and sent to the user's email address.
- **Edit User** – Modify the user's time zone, role, and device access.
- **Deactivate/Activate** - Suspend or restart a Barracuda Control Server user account. Deactivated users can no longer log into the Barracuda Control Server.

Chapter 4
Managing Products and Groups

This chapter illustrates using all of the features of the Barracuda Control Server to manage your devices in either a group context or individually.

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Barracuda Control Server Administration

When you log into the Barracuda Control Server as the *Barracuda Control Server Account Admin*, the Cloud Control *context* and the **CLOUD CONTROL > Status** page of the Barracuda Control Server web interface displays. In this context you view a summary of all devices connected to your Barracuda Control Server. Any Barracuda Networks products you have already connected are listed in the left Products pane. The central portion of the page displays aggregated performance and traffic statistics for all connected devices.

For all devices of the same type, the **CLOUD CONTROL > Status** page shows a graph and corresponding table listing statistics aggregated across all devices over the past 30 days. For example, if you connect multiple Barracuda Web Application Firewalls, the **CLOUD CONTROL > Status** page shows a graph and corresponding table listing detected attacks, totaled by attack type (XSS Injections, Injection Attacks, Cookie Poisoning, etc.), over the past hour, 24 hour period, and grand total since the last system reset. If you connect multiple Barracuda Web Filters, a table and graph display total Spyware downloads, Virus Downloads, Policy (number of threats blocked by your configured policies), etc. aggregated across your connected Barracuda Web Filters.

If you have various different Barracuda Networks products connected to your Barracuda Control Server, a separate set of statistics displays for each device on the **CLOUD CONTROL > Status** page. This is useful for having a 'snapshot' of activity on all of your Barracuda Networks products on one page.

On the right of the page the Unit Health pane summarizes performance statistics for each system by device type.

From the **CLOUD CONTROL** tab:

- The **Connect Products** page gives instructions for adding Barracuda Networks products to the Barracuda Control Server.
- The **My Account** page enables setting Time Zone, Account Notification Email Address, Account Name and Account Preferred Time Zone (the default time zone used to display statistics and report data).
- The **User Management** page lists users including roles, status (Active, Inactive), Administrator actions, and time zone.
- The **Audit Log** page lists login activity.
- The **Task Manager** page displays tasks and any task errors.

From the product context or group context, you can always return to the Cloud Control context by clicking the **Cloud Control** icon in the left pane as shown below.

Figure 4.1: Return to the Cloud Control context by clicking the Cloud Control icon.

Managing Products

Connecting and Disconnecting Devices

You must log into your Barracuda Networks product web interface directly to connect or disconnect it to/from the Barracuda Control Server.

To connect a product to the Barracuda Control Server, log into the web interface as the *Barracuda Control Server Account Admin*, and go to the **CLOUD CONTROL > Connect Devices** page. Follow the steps on this page to connect the product.

To disconnect a product from the Barracuda Control Server, log into your Barracuda Networks product web interface. Go to the **ADVANCED > Cloud Control** page, click *No* for **Connect to Barracuda Cloud Control**, and click **Save Changes**. Go to the **BASIC > Status** page of your product, and verify that the **Cloud Control** status displays as **Not Connected**. When you log into the Barracuda Control Server, the product no longer displays in the product tree.

The Product Tree

Once you connect one or more Barracuda Networks products (devices) to your Barracuda Control Server, the products display as a list in the product tree in the Cloud Control pane, and are listed by product type under **Products**. If you click **Groups**, your Barracuda Networks products are listed by groups you have defined, or you can create new groups.

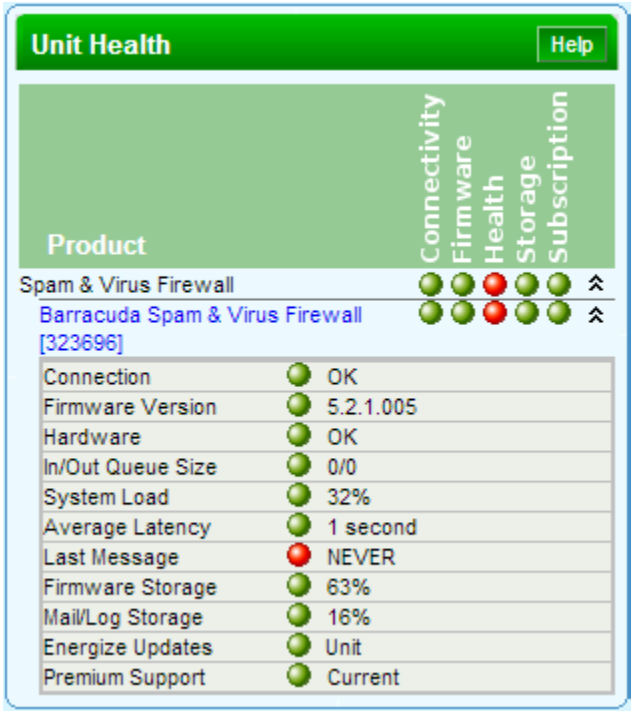
The Firmware Tree

Click **Firmwares** in the Cloud Control left pane, and expand the product tree. Each firmware version displays as a separate folder beneath the device name. Expand the folder to view all devices currently on that firmware version. The **Unit Health Pane** indicates whether firmware is the current release or if a new release is available for download.

The Unit Health Pane

Click **Cloud Control** above the product tree on the left side of the screen to return to the Cloud Control *context*, where you can see the Unit Health pane on the right side of the screen. The Unit Health pane indicates, for each of the connected Barracuda Networks products, a general status for performance statistics. Click on the **Expand** (⌄) icon on the right side of the pane to expand the detailed list of performance statistics for the selected device. This list varies amongst product types.

Figure 4.2: General status for each connected device



Legend for the Unit Health pane is as follows:

- Connectivity: Green indicates device is connected, red indicates device is not connected
- Firmware Version:
  - Green indicates current release
  - Yellow indicates that a new minor release is available for download
  - Red indicates that a new major release is available for download
- Health: General indicator of device performance statistics
- Storage: Green indicates there are no storage issues, red indicates there are storage issues
- Subscription: Green indicates that Energize Updates, Instant Replacement (where applicable) and Premium Support (where applicable) are current for the device, red indicates that one or more of these subscription items is either expired or not yet activated

Product Context

When you click on a particular device in the product tree or the Unit Health pane, the unique statistics and settings for that device display with the same web interface you would see if you logged directly into the web interface of that device outside of the Barracuda Control Server.

The product web interface displays settings only for that device. For the selected product, you can view and change all settings available from within the Barracuda Control Server web interface; note that some settings are *not* available from within the Barracuda Control Server web interface and must be configured from logging into the device directly from your browser. Pages or settings not available from within the Barracuda Control Server are grayed out.

Interpreting Device Statistics

The **CLOUD CONTROL > Status** page provides an overview of the performance and health of all of the Barracuda Networks devices connected to the Barracuda Control Server. In this view, the same traffic and performance statistics available in the **BASIC > Status** page for your other Barracuda Networks products display. Where there are multiple products of the same type, the statistics are aggregated in one section of the page. To view the traffic and performance statistics of a single device, click on the device name in the product tree or in the Unit Health pane.

Groups

Synchronizing Settings Across a Group

Applying policies across a group of same-type Barracuda products is perhaps the most powerful feature of the group context. For example, if you have several Barracuda Web Application Firewalls grouped and you want to enable *Encrypted* **Cookie Security Mode** on all of the devices, you would do the following:

1. Click on the group link for those products in the product tree.
2. Navigate to the **BASIC > Default Security** page and click on *Encrypted* for **Cookie Security Mode**, then **Save Changes**. This setting synchronizes across all devices.
3. To change the value of a setting on just one of the devices, from the product tree, click on the device itself within the group. You will see the individual product web interface, where you can navigate to the appropriate page and change the setting as needed. Doing so causes a yellow **Exception** () icon to appear in the Group context web interface as described below.

Settings Not Configurable in the Group Context

Some features must be configured on each individual device within a group. Examples include IP Address, Quarantine settings on the Barracuda Spam Firewall, Services on the Barracuda Web Application Firewall, and Default Host Name on various product types. Note that some tabs or pages of the web interface (in the group context) for a product may be grayed out (unavailable) for this reason, or because the features on that tab or page are not supported in the group context.

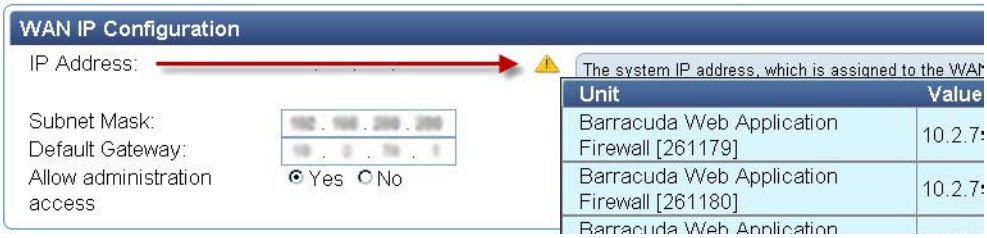
Dealing With Exceptions

Exception Triangle

When you are using the group context to view the settings on all devices of one type, if you see the yellow **Exception** ( ) icon next to the setting, this means that for a particular setting, the *values* of that setting differ across the devices in the group. You can hover the mouse over the setting to see a text box or table displaying the actual value of the setting on each device.

As shown in *Figure 4.3*, if you hover the mouse over the exception triangle, the Barracuda Control Server displays the value of that setting for each product in the group. In this example, each Barracuda Web Application Firewall in the group has, of course, a different value for the **IP Address**, each of which displays in a pop-up table when you hover the mouse over the exception triangle.

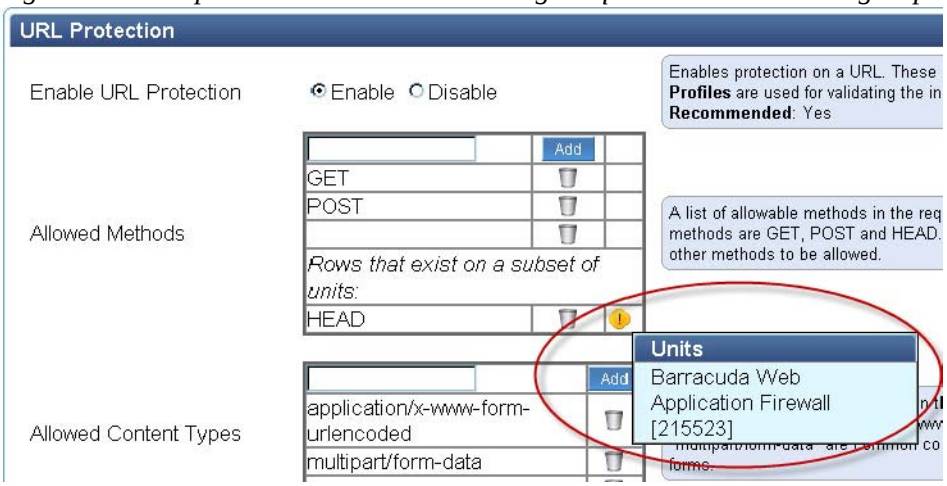
Figure 4.3: Exception triangle indicates different values for settings on products of same type



Exception Circle

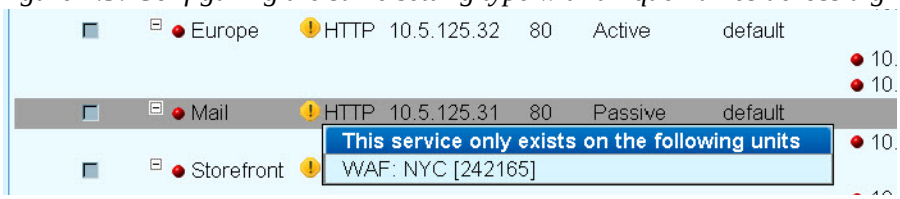
If you see the round yellow **Exception** (!) icon next to a setting, this indicates that the setting is unique to each device and is not shared or aggregated. For example, suppose you have multiple Barracuda Web Application Firewalls and you have configured the GET and POST **Allowed Methods** for each of them on the **Security Policies > URL Protection** page. Additionally, you have configured the HEAD **Allowed Method** for only one of the devices, so the round **Exception** icon displays next to the HEAD **Allowed Method** indicating that *this* value is additional and unique to a particular device. If you hover the mouse over the icon, a pop-up text box displays the device serial number as shown in *Figure 4.4* below.

Figure 4.4: Exception circle indicates a setting unique to one device in a group



In another example, if you have multiple Barracuda Web Application Firewalls in a group, you might configure an **HTTP** Service from the **BASIC > Services** page on all devices, but give each Service a unique name. The exception circle, as shown in *Figure 4.5*, indicates that the Service is unique to the device by **Name**, even though it's the same actual Service type (**HTTP**) as the Services on the other devices. If an **HTTP** service with the same **Name** was configured on each of the devices, you'd see one entry for the Service and no exception circle.

Figure 4.5: Configuring the same setting type with unique names across a group



Creating Groups

If you want to create a group of a 'mix' of different types of Barracuda products:

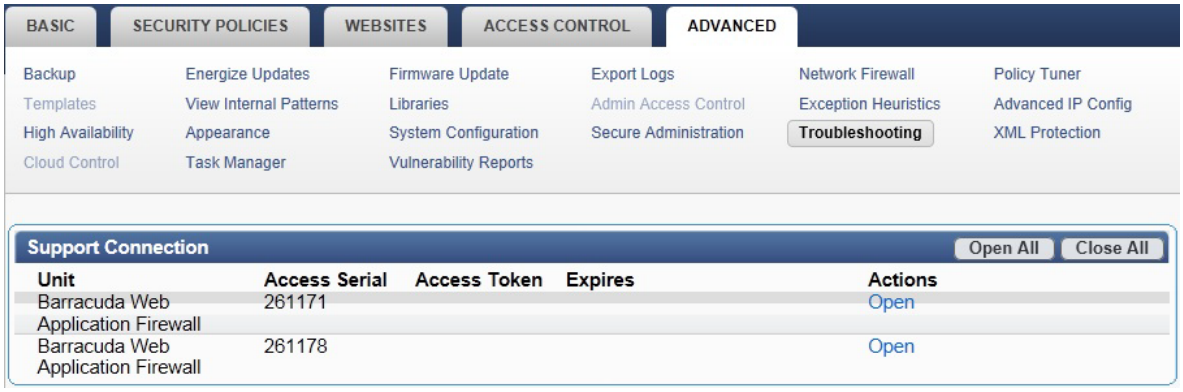
1. From the Cloud Control left pane, click **Groups**, and click **Add**. Enter a name for the group of devices. For example, if you want to group multiple types of Barracuda Networks products that serve the Marketing department, you could name the group *MarketingVarious*, indicating that there is more than one type of product in the group.
2. Next, click on each device you want to add, and drag it to the group name. The screen refreshes and that device is added to the group. Use the **Rename** and **Delete** buttons at the bottom of the pane to manage groups. Note that deleting a group does NOT disconnect the devices in the group from the Barracuda Control Server, it just removes the grouping.

Use Case Scenarios

Scenario: Opening a Support Tunnel on Multiple Devices

With the Barracuda Control Server, you can troubleshoot problem devices in a remote location from your office, or anywhere, by opening a support tunnel on one or more of your Barracuda Networks products at the same time. Barracuda Networks Technical Support can then assist you with any or all of the devices connected to your Barracuda Control Server. Using the Barracuda Web Application Firewall as an example, you click on **ADVANCED > Troubleshooting**.

Figure 4.6: Barracuda Web Application Firewall: Opening a Support Tunnel



Each Barracuda Web Application Firewall is listed by serial number. If the **Action** column shows *Open*, there is not a support tunnel currently open to the device. Click *Open* to open a support tunnel. You can then click *Close* at any time to close the support tunnel.

Scenario: Synchronizing Firmware and Energize Updates

The Barracuda Control Server provides a fast and convenient method of keeping track of firmware versions running on all of your Barracuda Networks products. Click **Firmwares** in the Cloud Control left pane, and expand the product tree. Each firmware version displays as a separate folder beneath the device name. Expand the folder to view all devices currently on that firmware version.

To change the firmware version of a device, click on the device name, and click on the **ADVANCED > Firmware Update** page. Click **Download Now** to update the device to the latest firmware release.

To update device definitions, click on the device name, and go to **ADVANCED > Energize Updates**. Click **Update** to update the device to the latest definition, or click **Revert** to downgrade to the previous definition version.

Scenario: Applying Policies Across Multiple Barracuda Web Filters

As an administrator of Barracuda Web Filters for a university, you may have two groups of devices; one group for faculty and staff and another group for students. You want to *allow* Skype and Yahoo IM internally for faculty and staff, but not for students.

To configure: Click on the Barracuda Web Filter group assigned to faculty and staff. From the web interface, you would set *Allow* for those applications on the **BLOCK/ACCEPT > Applications** page.

For the Barracuda Web Filters filtering student traffic, you want to block those applications, but allow Googletalk. Click on the Barracuda Web Filter group assigned to students. From the **BLOCK/ACCEPT > Applications** page you can configure these settings for the student group.

Additionally, your IT department may want to push Microsoft updates to student PCs, so, in the **Updates** section of the **BLOCK/ACCEPT > Applications** page, you might set **Microsoft Updates** to *Block*. However, the faculty and staff have admin rights to their PCs - you would set this value to *Allow* on that group.

Scenario: Aggregating Reports Across Multiple Products

Suppose you have connected three Barracuda Web Filters to the Barracuda Control Server and you want to run a report aggregating a list of users by bandwidth across all three devices. You assume all three devices are up and running. Run the report by clicking on the group of Barracuda Web Filters from the Cloud Control pane. Select the **Users by Bandwidth** report from the **BASIC > Reports** page.

As shown in *Figure 4.7* below, for the Barracuda Web Filters listed at the top of the report, an aggregated list of users shows in the table below the graph, sorted by the user with the most bandwidth used for the report time frame shown at the top. For more details about reports, see the Barracuda Web Filter online help on the **BASIC > Reports** page.

Problem: In the report below, you can see by the highlighted devices that two of the Barracuda Web Filters have data included in the report, but one of the three devices was unreachable by the Barracuda Control Server. This is an alert that there might be a power outage or network issue where that device is located.

Solution: Try logging into the web interface directly for the Barracuda Web Filter that was unreachable. If you can, then you can use the troubleshooting features on the **ADVANCED > Troubleshooting** page for that device, or you can open a support tunnel from the same page and call Barracuda Networks Technical Support if necessary. If you cannot log in directly from the web interface, you check the physical device.

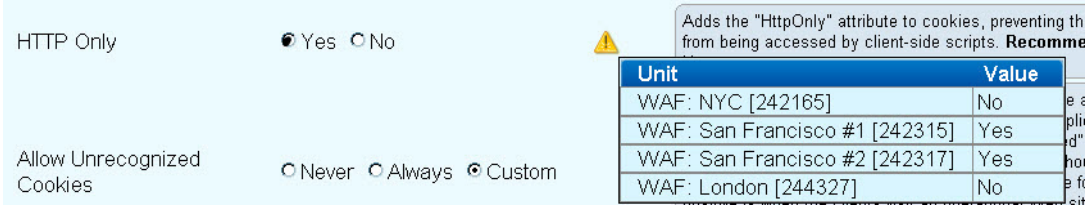
Figure 4.7: Data aggregated across multiple Barracuda Web Filters

Scenario: Synchronizing Security Policies Across Products

You have four Barracuda Web Application Firewalls serving three locations: New York, San Francisco and London. Your master Security Policies database dictates that all devices should have the **HttpOnly** attribute set to *Yes* for cookies, preventing the cookie from being accessed by client-side scripts.

To Configure: Click on the group of Barracuda Web Application Firewalls from the Cloud Control pane and check the **SECURITY POLICIES > Cookie Security** page. An exception triangle for this setting may display, as shown below, if the devices are not in sync for this setting. Hover the mouse over the setting to view the values for **Http Only** on each device in the pop-up table:

Figure 4.8: Exception shows different values for a setting across a group of devices



Resolving an Exception: To resolve the issue, click on the NYC and London Web Application Firewalls, successively, in the product tree, and change the settings to match those of the two San Francisco systems. Once you save those settings, the exception triangle no longer appears next to the setting when viewed in the Group context.

Chapter 5
Task Manager

This chapter covers features of the Barracuda Control Server appliance.

Using the Task Manager to Monitor System Tasks *32*
Troubleshooting *32*

Using the Task Manager to Monitor System Tasks

The **ADVANCED > Task Manager** page in the Cloud Control context provides a list of tasks that are in the process of being performed, and displays any errors encountered when performing these tasks. Some of the tasks that the Barracuda Control Server tracks include:

- Configuration restoration
- Connections
- Removal of invalid users

If a task takes a long time to complete, you can click the **Cancel** link next to the task name and then run the task at a later time when the system is less busy. The Task Errors section lists an error until you manually remove it from the list; errors are not automatically phased out over time.

Troubleshooting

You must be logged in as the Barracuda Control Server Administrator Account to access the troubleshooting tools described in this section.

Testing Network Connectivity

The Barracuda Control Server web interface provides a suite of tools to help diagnose potential network problems, including ping, telnet, dig/NS-lookup, TCP dump, and traceroute. See the online help in the **Network Connectivity Tests** section of the **ADVANCED > Troubleshooting** page for details about using these tools.

Connect to Barracuda Support Servers

In the **Support Diagnostics** section of the **ADVANCED > Troubleshooting** page, you can initiate a connection between your Barracuda Control Server and the Barracuda Networks Technical Support Center which allows technical support engineers to troubleshoot any issues you may be experiencing.

Appendix A
About the Hardware

Hardware Compliance

This section contains compliance information for the Barracuda Backup Service hardware.

Notice for the USA

Compliance Information Statement (Declaration of Conformity Procedure) DoC FCC Part 15: This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received including interference that may cause undesired operation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user in encouraged to try one or more of the following measures:
   - Reorient or relocate the receiving antenna.
   - Increase the separation between the equipment and the receiver.
   - Plug the equipment into an outlet on a circuit different from that of the receiver.
   - Consult the dealer or an experienced radio/television technician for help.

Notice for Canada

This apparatus complies with the Class B limits for radio interference as specified in the Canadian Department of Communication Radio Interference Regulations.

Notice for Europe (CE Mark)

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Appendix B

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